An Unusual Case of Immune Hydrops Occurring in a Primigravida

Dahiya Pushpa, Agarwal Umber, Sangwan Krishna

Department of Obstetrics and Gynecology Pt. B.D. Sharma, PGIMS, Rohtak - 124 001.

Key words: hydrops, immune hydrops

Case Report

A 25 year old primigravida presented at the antenatal OPO at 20 weeks of gestation. Her obstetric examination and routine antenatal investigations were normal except that her blood group was A negative. Her husband's blood group was advised to be checked, but could not be done as he was outstation. Indirect Coomb's test (ICT) was negative and there was no previous history of having received blood transfusion. Level II ultrasound for fetal well-being was normal. Pregnancy continued uneventfully. Repeat ICT was advised at 28 weeks but she did not get it done and refused antenatal anti-D also. At 37 weeks, she presented with diminished fetal movements. Following normal obstetric examination, an ultrasonography was done which revealed a grossly hydropic fetus with ascites, hepatosplenomegaly, pleural and pericardial effusion and skin edema greater than 5mm. Labor was induced and she delivered vaginally, a hydropic male baby weighing 3 kg (Photograph 1) which died immediately after birth. An ICT done on the mother was positive in 1:256 dilutions. Cord blood was 0 Rh+ve and direct Coomb's test was strongly positive.

Paper received on 8/2/02; accepted on 28/5/02

Correspondence:
Dr. Pushpa Dahiya
Department of Obstetrics and Gynecology
4/8 J, Medical Enclave, Pt. B. D. Sharma, PGIMS,
Rohtak - 124 001.
Tel. 0126251432



Photograph 1: Grossly hydropic male baby

The only theory to explain the above phenomenon is that of "Grandmother Syndrome". This patient, when she was in her mother's womb probably got sensitized following fetomaternal hemorrhage of Rh positive blood from her mother and a permanent template was formed. The antibody concentration was undetected by contemporary essays until 20 weeks. But following exposure to new load of O-antigen from her fetus (hence the grandmother connection), the immune memory got awakened and led to this extremely rare case of severe alloimmune hemolysis in the primigravid patient'.

Reference

 Manning FA. Fetal Medicine Principles and Practice. Norwalk, Connecticut. Appelton & Lange 1995: 402-3.